

LEADERSHIP IN THE INTERACTIVE AGE

Concepts and Tools
for Technical Professionals

Live on the Satellite Network
January 9 Through February 25, 1995
Every Monday
11:00AM to 1:00PM Eastern Time



January 9, 1995

Leadership and Technology: Is Your Mental Map Ready?

Our models of organizations and ourselves are out of date. The world has changed around us. The gap between what is and what we perceive has widened to the point of breaking. We must change our mental maps to reflect these changes. And, we

must lead our organizations to emulate the new mental maps.

We are at a crossroads and we have a choice. We cannot deny any longer the need for change or waste our

energies any longer fighting against it. We must embrace change and develop our ingenuity and the ingenuity of our organizations. Ingenuity is the intrinsic ability to know ourselves and our talents, become our personal best, and continuously expand and recreate ourselves and our capabilities.

In the industrial age, communication was characterized by the gathering and disseminating of information. This has culminated in what is currently referred to as the information age. The information age, in fact, is a transition period that marks the end of the industrial age and the beginning of the interactive age.

In this transition, our task shifts from the acquiring, hoarding and communicating of information to conversing with each other, globally, in real time. By utilizing past and present information and applying that information, we can better discern our futures and continuously recreate our organizations.

The reorientation of our mental map includes the redefinition of technology and leadership. It is the interaction of ingenuity with leadership and technology that is the accelerator of innovation—the necessary bottom line for all organizations.

This presentation will help prepare your mental map for the new realities of work. You will learn new perspectives on ingenuity, technology, leadership and the transition to the interactive age.

**“When you come to
a fork in the road,
take it.”**

—Yogi Berra

January 16, 1995

Personal Ingenuity and Emerging Technologies

Technology has propelled our evolution for thousands of years at a steadily increasing rate as we seek to expand the mental maps of our existence. Technology is a reflection of our ingenuity and supports us in the development and application of our ingenuity. Technology helps us to know, to be, and to create.

Technology historically has shaped the nature of work. Today's technology is creating new expectations in the workplace, replacing the concept of jobs.

In the interactive age, technology will be re-integrated into the fabric of our lives in new ways as we seek a balance of knowing, being and creating.

Technology casts a long shadow. The technologies important for the next 10 years have surfaced. The race has already begun. To gain competitive advantage, you must be aware of these emerging technologies, understand them and be able to apply them to help solve problems and advance your capabilities.

Technology exists in three forms—direct, supportive and enabling. Direct technologies are those integrated into the product or service. Supportive

technologies are those that are involved in the research, development, manufacture or distribution of the product or service. Enabling technologies provide advancement in either direct or supportive technologies.

In this presentation, you will learn about the

history of the development of technology and how it affected organizations, jobs and the nature of work. You will understand how technology can be a facilitator, driver and result of change. And, you will see some personal opportunities in emerging technologies. The key direct, supportive and enabling technologies of the interactive age will be identified and discussed. You will see how these technologies will help develop and facilitate ingenuity in the interactive age.

**“He that invents a
machine augments
the power of a man
and the well being
of mankind.”**

—Henry Ward Beecher

January 23, 1995

Knowledge and the Ethics of Technology

As our nation moves into the interactive age, knowledge grows in geometric proportion to our interaction, on a global level, with technology and each other. Such interaction provides unlimited access to that information and, in turn, unlimited choices.

However, in the interactive age, all knowledge is subject to change as fast as the technology and information at hand at any given moment changes. While access to information is unlimited, any permanent knowledge is limited by its potential obsolescence in the face of continual change.

Viewed as an instrument of growth and evolution, technology provides the

progressive ability to respond to change to become the very best we can be, and to be a force for society's advancement. While the industrial age focused on matching specific skills to job descriptions, the interactive age requires a shift in preparation, motivation and expectations.

In the age of interaction, we are challenged to continually redefine our talents and face the ongoing task of expanding our perceptions of our purpose and capacity to do our work. In short, we need to continually comprehend our place in the scheme of things and prepare ourselves to be effective in a variety of possible settings. Technology has forced the ethical question upon us: "What are we here for?" Our ingenuity provides us with the tools to answer the question: "We are here to expand our capacity, to be all we can be, to do our work, and to serve our unfolding purpose in the course of human history."

This presentation will provide you with tools to interact effectively with technology, understand the limitations of knowledge and develop that aspect of ingenuity needed to convert information and knowledge into creative action and growth.

"As we acquire more knowledge, things do not become more comprehensible but more mysterious."

—Albert Einstein

January 30, 1995

Integrating Technologies in the Age of Interaction

The way we work has forever changed. Computers, communications and related software technologies have created a cyberspace in which we all operate. These information technologies, packaged in useful forms, have become a powerful new personal teammate. They can compress both time and space. Making full use of the information technologies enables you to traverse the information highway at electronic speeds interacting with others to facilitate teamwork and improve creativity.

You can become a time traveler—reaching back into the past to understand the patterns of historical development that shed light on the present. And, you can use these technologies to help you perceive the potential futures awaiting you.

Information technologies also redefine teams and teamwork. Teams do not have to all be at the same place at the same time. Members of the team can be spread over the globe and interaction can occur asynchronously, or teams can become the dominant form of work, as in Japan where software factories have totally integrated information technologies into the workplace.

Information technologies can facilitate teamwork by breaking down the communication barriers that exist whenever people get together. Soon, these technologies will even make interaction possible in different languages. Groupware, software for teams, can improve the creativity of teams.

"The sum total of all human knowledge amassed throughout history is only one percent of the information that will be available to us by 2050."

—Marvin Cetron

—Owen Davies

This presentation will enable you to better perceive information technology as your teammate. You will learn how to use it to improve teamwork and creativity, and lift communication to the level of conversation.

February 6, 1995

Leading in the Age of Interaction: Tools That Recreate

As we move from the industrial age to the interactive age, the focus of leading shifts from the player to the playing field, with the playing field designed for team play. Leading will be defined by commitment rather than charisma, by ingenuity rather than authority and by conversation rather than connections.

The role of the leader in the interactive age will involve using the tools of ingenuity and technology to decompartmentalize organizations, their people, their markets and their services. Leading, in an environment of ongoing change, will require synthesizing knowledge, vision and creativity in order to continually recreate teams and organizations and position them to anticipate, initiate and respond to change.

Motivation will determine the ability to lead, as will the ability to integrate lifelong learning and flexibility into personal and professional goals. Job security, linear promotions, pensions and retirement are expectations that bond potential leaders to the strategies and systems of the industrial age and block their readiness to respond effectively to change.

The new voices of leaders in the interactive age call for knowing who you are, being and becoming all you can be, and continuously and creatively

interacting with your environment. You will be hearing from some of today's interactive leaders.

In this presentation, you will be introduced to the tools of ingenuity and technology as they apply to leadership in the

interactive age. A profile of the leader in the interactive age will be outlined. You will also be given tools to evaluate your capacity to lead in the interactive age, including your motivations, expectations and readiness to respond to change.

**"The most important
trait of a good leader
is knowing who
you are."**

—Edward McCracken

February 13, 1995

Leadership is a State of Mind, Not a Position

In the interactive age, leaders in organizations will emerge from any position within and outside the organization. In this case, the common characteristic of leadership will be dominated by ingenuity.

Interactive leaders will be able to motivate by ennobling, enabling, empowering and encouraging. They will be able to establish a shared vision, mission, goals and values in organizations.

**"At first it's hard to
persuade leaders to
let go of control."**

—Erika Anderson

Interactive leaders will be able to discern the difference between intrinsic and extrinsic values. They will be able to guide the organization toward those intrinsic values

necessary to facilitate discovery and realization of its purpose.

Interactive leaders will see themselves as members of a team, viewing both technology and colleagues as teammates. They will be open to possibilities different from and possibly exceeding their expectations and they will be able to continuously evaluate and change their perceptions of their purpose within an organization.

The new leaders will live life responsively, be open to interaction, and be available and responsible to themselves, to others and to their environment. They will perceive the resources of life as abundant, and they will have the capacity to risk intimacy, to share knowledge and to build community both internally and externally.

Interactive leaders will continually rediscover who they are and integrate learning, work and play throughout their lives.

In this presentation, you will be given the key perspectives of interactive leadership and the tools to apply those perspectives to motivating others, shaping values and building community. You will have the opportunity to compare your own perspectives with those of today's interactive leaders.

February 20, 1995

Leadership, Ingenuity and Technology Interaction: Accelerators of Innovation

Innovation is the only real function of organizations. Change, the one constant in our lives, is the driver of innovation. In today's environment, it is innovate or die!

The challenge for today's leaders is to help organizations learn to innovate. This will require the ingenuity of everyone in the organization, not just a select few. Interactive leaders will know how to innovate: seek change, gain the vantage point, motivate freedom and delight customers. Interactive leaders understand and utilize the power of technology to help the organization delight its customers, stakeholders and employees; gain competitive advantage; and realize its purpose.

Leaders employ ingenuity to perceive changes in the organization's market. Ingenuity enables the perception of the opportunities caused by the interaction of the customer's needs, technological capability and competitive response, all embedded

in an environment of social, political, economic, demographic and technical driving forces for change.

Establishing a strategy that sails on the winds of market change and fulfills the organization's purpose requires ingenious leaders.

Delighting customers can happen only if the leaders can perceive their

unarticulated needs and deliver products and services to meet those needs in a timely manner.

In this presentation, you will be introduced to a model for organizational innovation that enables organizations to identify opportunities in markets for innovation and to develop innovation strategies that balance the opportunities and threats in a market, the desires of stakeholders, the capability of the organization for innovation, and its capacity for development.

"To meet the demands of the fast-changing competitive scene, we must simply learn to love change as we have hated it in the past."

—Tom Peters

February 27, 1995

Organizations and Individuals that have Invented New Tools for New Times

Technology and globalization have brought us and our organizations to a crossroads. The information age is the transitional period from the industrial age to the interactive age.

The interactive age will be characterized by our ability to converse with each other globally connect rapidly with our past, and better discern our future. The environment in which we and our organizations must work is now radically different than it was when our organizations were created. New times require new perspectives and new tools.

Ingenuity is our innate ability to adapt to, and even anticipate, the changes in our environment. Ingenuity allows us to develop new tools and perspectives so we can make the most of the resources we have to create our future.

Ingenuity constitutes our intrinsic ability to be leaders: to know ourselves, become ourselves, and continually recreate ourselves and our organizations; to motivate others by ennobling, enabling, empowering, and encouraging; and to establish a shared vision, mission, goals and values.

Teamed with technology, ingenuity points us to the inevitable opportunities in technological development and provides us with the perspective of leadership from any position within or without the organization.

A five-year plan for the next century begins with an assessment of motivations and goals, and includes a plan for change, a course of action, and ongoing evaluation.

This presentation will present a summary of the previous seven topics through interaction with today's leaders. You will learn a seven-step program to begin your journey as an influential leader in the **Age of Interaction**.

"The responsibility for change lies within us."

—Alvin Toffler

Speakers and Moderators - Leadership in the Interactive Age



Barbara Benjamin

Barbara Benjamin, founder of Intuitive Discovery, is an educator, author and consultant who lectures internationally and conducts retreats and workshops in creative and personal development, motivation and leadership. Her clients include Xerox, the Juran Institute, Viacom Productions and IBM. She was the founding president of an eyewear importing firm, where she developed and supervised a national sales force. Ms. Benjamin's experience also includes more than 20 years in education administration, training and teaching. She is the author of the Pulitzer Prize nominated book of poetry *Through My Window* (1988) and an author and co-author of several other books.



Donna C. L. Prestwood

Donna Prestwood, co-founder of Glocal Vantage, Inc., has been a corporate growth specialist for nearly 20 years. A recognized expert in technology, she is an internationally requested speaker and lecturer with a list of credits that spans the state-of-the-art in business development and global change. Ms. Prestwood is listed in who's who of U.S. Executives and who's who of American Women. She is co-author of the book *Innovate!: The Straight Path to Quality, Customer Delight and Competitive Advantage*, published by McGraw-Hill in April 1994 and *Superconductivity: A Practical Guide for Decision Makers*.



Paul A. Schumann, Jr.

Paul Schumann, Jr., co-founder of Glocal Vantage, Inc., is a recognized expert in organizational growth strategies and development. Throughout his 34-year business career as a consultant, entrepreneur, manager and technologist, he has operated in the worlds of technology, market development and business strategy. An internationally known management consultant, he holds ten patents and has authored numerous articles and chapters in business and technical publications, including the creation and editing of an award winning corporate newsletter *Creativity!* He is the co-author of *Innovate!* and *Superconductivity a Practical Guide for Decision Makers*.

Voices of Today's Interactive Leaders

In keeping with the interactive theme of this series, examples of leadership from today's organizations will be integrated into this series. These leaders will participate either by videotaped interview, videotaped presentation, audiotape, live telephone interview or studio presentation.

The following is a partial list of those who will participate in the series:

- **James Autry**, former CEO, Meredith Corp., author of *Love and Profit*
- **Dr. Barry V. Bales**, Director Professional Development, LBJ School of Public Affairs
- **Connie Bruno**, Director of Professional Services, Right Associates
- **Dr. Jan Brown**, Consultant (formerly with Department of Energy)
- **Roseanne Cahn**, Director, Economist Department, CS First Boston
- **Paul Duffley**, Vice President Trade Management, East Coast, PepsiCo
- **Ron Edelstein**, Director Planning and Appraisal, Gas Research Institute
- **Joseph Girzone**, author of *Joshua*, *Joshua and the Children*, *The Shepherd*, *Never Alone* and others
- **Harriet Honicky**, Director Human Resources - Quality, AT&T
- **Dr. Shirley Kenny**, President, State University of New York at Stony Brook
- **Dave Monson**, President, Sterling Health Services
- **Anne Durrum Robinson**, Creativity, Communication, Common Sense
- **Virginia Silver**, Director, Human Resources, International Paper
- **Sam Zigrossi**, Site Business Unit Executive, IBM

Plus many others. . . .

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These are
difficult times!
Change is
everywhere.

The pace is
accelerating,
propelled by global
social, political,
economic,
technical and
demographic
forces.

These are times
about which scientists,
sociologists and historians will
write books.

Our country is in the
midst of transition from the
last vestiges of the industrial
age to the age of interaction —
a special time full of
opportunity and
challenge.

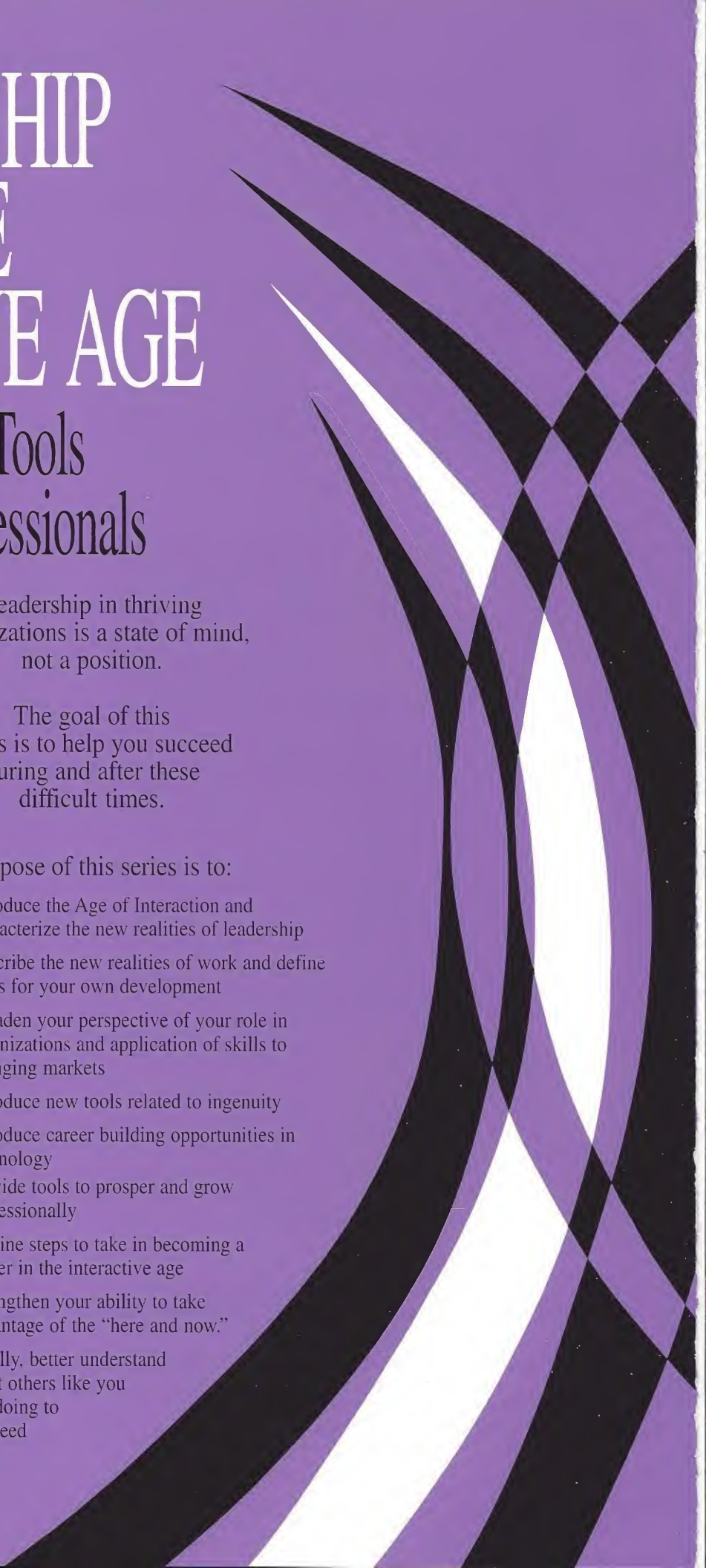
Leaders at all levels
must be able to model and
encourage the application
of ingenuity.

Leadership in thriving
organizations is a state of mind,
not a position.

The goal of this
series is to help you succeed
during and after these
difficult times.

The purpose of this series is to:

- Introduce the Age of Interaction and characterize the new realities of leadership
- Describe the new realities of work and define areas for your own development
- Broaden your perspective of your role in organizations and application of skills to changing markets
- Introduce new tools related to ingenuity
- Introduce career building opportunities in technology
- Provide tools to prosper and grow professionally
- Outline steps to take in becoming a leader in the interactive age
- Strengthen your ability to take advantage of the "here and now."
- Finally, better understand what others like you are doing to succeed



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Concepts and Tools for Technical Professionals

National Technological University (NTU)

is a private, nonprofit institution founded to serve the advanced educational needs of today's busy, highly-mobile engineers, scientists and technical managers.

NTU offers Master's of Science degrees in:

- Computer Engineering
- Computer Science
- Electrical Engineering
- Engineering Management
- Hazardous Waste Management
- Health Physics
- Management of Technology
- Manufacturing Systems Engineering
- Materials Science and Engineering
- Software Engineering
- Special Majors Program

NTU also offers non-credit short courses, seminars and workshops on leading edge engineering and computer topics.

Participating Universities

Arizona State University
Boston University*
Colorado State University
Columbia University
Cornell University
The George Washington University
Georgia Institute of Technology
GMI Engineering & Management Institute
Illinois Institute of Technology
Iowa State University
Kansas State University
Lehigh University
Michigan State University
Michigan Technological University
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